



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,906	07/10/2003	Mikio Shiraishi	520.37572CC2	9559
20457	7590	02/02/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			KOVAL, MELISSA J	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/615,906	Applicant(s) SHIRAISHI ET AL.	
	Examiner Melissa J Koval	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/392,563.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 07/03 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

Applicant may want to update the first paragraph of the specification to include the patent number for application serial number 10/028,424 referred to therein.

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 through 4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-4 and 6-8 of U.S. Patent No. 6,334,686 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the patent to Shiraishi et al. '686 B1 set forth a plurality of cooling wind supply openings, at least two of the cooling supply openings being arranged in different directions and at least the light

Art Unit: 2851

valve or the polarization unit being cooled by wind from the cooling supply units, but the patent does not teach for providing a separate branch path for cooling the illumination unit as well as a separate branch path for cooling light valves. However, because the patent does set forth the following devices: a light valve, an illumination unit, a polarization unit and a projection lens and then uses the term "at least" with respect to the cooling of at least one of a light valve or a polarization unit, the patent implies that any of said devices may be cooled. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to cool at least any two of the devices comprising the projector device by means of split wind cooling openings, thus meeting the limitations of claim 1 of the application. The motivation for one having ordinary skill in the art to cool more than one device comprising the projector would be to increase the life of the projector. The light source unit described in claims 1 and 4 of the application is notoriously well-known in the art and does not patentably distinguish over the illumination unit of the patent. Furthermore, multiple light valves are notoriously well-known in the art for color projection systems as well as are centrifugal fans. As the claims of the patent provide for cooling wind openings separated in direction within a large range, it is not clear how the claim 3 of the application patentably distinguishes over the claims of the patent.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miyamoto et al. U.S. Patent 6,443,575 B1 teaches a projector with inlet fan, outlet fan and ventilation duct structure for cooling an optical system.

Fuse et al. U.S. Patent 6,280,038 B1 teaches optical equipment.

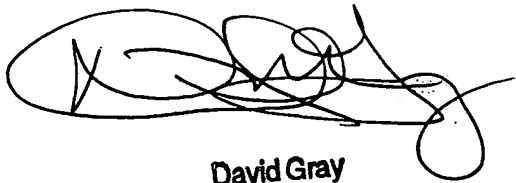
Konuma et al. U.S. Patent Application Publication US 2003/0206276 A1 teaches a liquid crystal projector, and projection lens unit, optical unit and cooling system for the same.

Wang et al. US Patent Application Publication US 2002/0075457 A1 teaches a projection display with twin-blower heat-dissipating system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J Koval whose telephone number is (703) 308-4801 or (571) 272-2121 after January 30, 2004. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached on Monday through Thursday at (703) 308-2847 or (571) 272-2112 after January 30, 2004. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



David Gray
Primary Examiner

MJK